AT-1 Mini Personal GPS Tracker
(GPS+SMS+GPRS)
Technical Manual

1.1 Introduction

AT-1GPS Tracker is the world's smallest surface of a personal remote positioning tracking devices, based on GPS technology and GSM / GPRS technology made of. Access to the user via SMS latitude and longitude location information, and then in Google Maps or other mapping software found on the user's location; or tracking device positioning data uploaded via GPRS to a designated server, the user query through the Internet real-time location tracking devices, historical trajectory. The product is compact, stylish, dynamic, in caring for the elderly, children best; also be used for the protection of property, tracking animals, and other fields.

1.2 Features

High-performance GPS chipset built-JRC. In weak signal conditions can pinpoint; in urban canyons and other areas with limited sky view can be good work.

Built-in GSM / GPRS module, support GSM900/1800MHz. (850/1900 optional to do), can work worldwide. Support the SMS communication or GPRS TCP connection can be to receive location information by SMS or the Internet to view trajectory.

With SOS help function, electronic fence function, remote monitoring, historical data upload, uploaded regularly and so on. Main technical indexes meet the international standard GSM mobile phones, portable, compact, low power, dynamic, fashion

1.3 Specification

Hardware	
GSM Module	MTK program, GSM 900/1800 / 850/1900 dual-band or quad-band support for TCP protocol
GPS Chip	JRC High sensitivity GPS chipset
GPS Sensitivity	-164dBm
GPS Frequency	L1,1575.42MHz
C/A Code	1.023MHz
Passage	210-channel, full-track
Location accuracy	2.5m, CEP
Speed Accuracy	0.1 m/s
Time accuracy	1 us and the GPS time synchronization
Coordinate system	WGS-84
Regain	Average of 0.1 s
Hot start	Average of 1 s
Warm Start	Average 30 s

Cold start	Average 38 s
Height restriction	Maximum 18,000 meters (60,000 feet).
Speed limit	The fastest 515 m / s (1000 section).
Acceleration limit	Less than 4g
Operating Temperature	-25℃ to 70℃
Humidity	5% ~ 95% No coagulation
Size	50mm*44mm*16mm
Battery and Voltage	1200 mAh Rechargeable battery (3.7V)
Charger	DC 5V

2.1 Structure

2.2 LEDLED status description

1、Blue LED --- instructions GSM signal state

Status	Meaning
Flash	No SIM card or no GSM network

Flash once every 8s	GSM The receiver works well and the standby

2、Red LED --- charging instructions like

Status	Meaning
Always	Charging
Micro-light	Charging complete

3、Green LED --- direct GPS signal status

Status	Meaning
Does not shine (GSM indicator light of the circumstances)	Work, but did not locate
Slow flash	Work, has been positioning

Tip: How to get a better GPS signal：

●Outdoor；

●AT-1 charging port down to stand up.

2.3 Key function description

Button	Meaning
Power Switch	Long by 3-5s Off; short press to hang up incoming calls.
SOS button	Long press the button for 3 seconds, sending location information to the stored telephone numbers of 3 users upload or through GPRS location information to the server

2.4 Annex

●AT-1 host a

●Travel charger or car charger

●USB Charging Cable

●Subsidiary of the CD manual

2.5 Install SIM card

1.select the SIM card:

● You can use a local moving company's SIM card.

● support for SMS / GPRS features and has enough balance.

2.open the device shell, the special SIM card into SIM card slot and lock.

2.6 battery before using the AT-1, in order to extend battery life, it is recommended in the first three will be turned off after use electricity is fully charged to 12 hours.

Note: DC charging port can only be used to do. Do not take other equipment in order to avoid product damage.

2.7 Power on / off

boot: Hold down the power button and wait while some 3s and release, blue lights flashing green light after a few seconds, indicating the machine starts.

Shutdown: Hold down the side of the boot after the power button and wait for about 3s. When the LED goes out, that equipment has indeed turned off.

Specific Application

When you read the brief description of the product, the product has been installed, SIM card already installed. Start following a specific use.

1.11 First step, a product owner, stored telephone numbers, and only had phone numbers stored, the product will send you instructions to respond to other messages in order to work properly. Products of the factory configured in the appendix. Command as follows:

Instruction format: * New number 4-20 bit * Password 4 * number (1-3) **

For example: * 13900000000 * 0000 * 1 **

Note: User initial password is: 0000.AT-1 can be stored up to three phone numbers. When theAT-1 receiving the order, confirm the user password is correct with the new number to replace the existing number, after the success of the sender to send the confirmation to the "SET USER NUMBER (1-3) OK".

1.2 Mode of introduction of products

The product has two modes of the SMS point to point mode and GPRS online mode, the user would like to use if necessary, read the vehicle with a mobile phone (ie products) latitude and longitude, map, check with the Internet, by phone control to control vehicle oil road leads off the point to point can be selected messages; required dynamic real-time monitoring of vehicles can use GPRS real-time online mode. Switching modes are as follows:

2 Based on the general application of SMS Point to Point

The product's default mode is SMS point to point mode, do not switch; if from the GPRS mode to switch to point mode, press the 2.1.0 operation.

2.10 SMS point to point mode:

Command format: 700 + user password (4)

For example: 7,000,000

Description: WhenAT-1 receive the SMS, to confirm the user password is correct, the switch to SMS application mode. After the success of the sender to send the confirmation to the "SET MODE OK, CURRENT MODE: SMS P2P".

2.1.1 Single positioning request instructions

Command format: 666 + user password 4

example: 6,660,000

Description: When theAT-1 receiving the order, confirm the user password is correct, read the GPS information, regardless of the validity of the original software, set it with the base station with return return to the sender.

Data format:

Lat: latitude (+/-) latitude value (precision after the decimal point 5)

Long:: longitude direction (+/-) longitude value (precision after the decimal point 5)

Speed: speed KM / H (precision after the decimal point 2)

Direction: Heading (accurate to two decimal places)

Date: Date YYYY-MM-DD

Time: Time HH: MM: SS (GMT)

BS: base station information

FIX: Position Status (A / V)

ID: IMEI

STATE: Information Status

Valid data sample:

Lat: +22.50500

Long: +114.01000

Speed: 0.00KM/H

Direction: 315.00

Date: 2008-04-25

Time: 16:39:45

BS: 25ee0dff

Fix: A

ID: 353686009002030

STATE: SMS

Invalid sample data:

Lat: +22.50500

Long: +114.01000

Speed: 0.00KM/H

Direction: 315.00

Date: 2008—04—25

Time: 16:39:45

BS: 25ee0dff

Fix: V

ID: 353686009002030

STATE: SMS

Note: If the cold start and the GPS does not locate, then return invalid information as shown below.

Cases: ERROR GPS GPRMC FRAME DATA

BS: 27971054

ID: 353686009002030

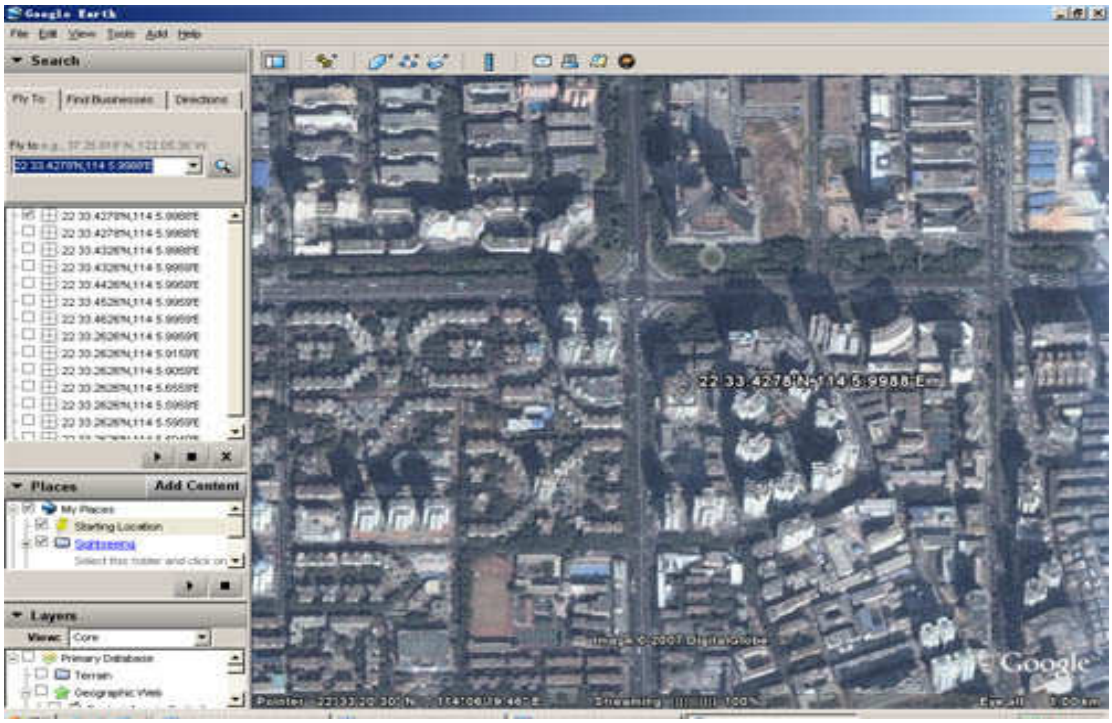
STATE: SMS

Note: If the cold start and the GPS does not locate, then return invalid information is shown below.

Eg:GPS UNAVAILABE,PLEASE TRY AGAIN LATER

2.1.2 Show Location on Map

1、Download Google Maps software from http://earth.google.com



2, Start Google Maps software (for more information on the Google Maps software, please refer to http://earth.google.com) as shown above. (Note change in location data format) or you can copy http://maps.google.com in the Internet browser to connect Google Maps site shows location map.

3, send "666 + code" SMS command to theAT-1 have latitude and longitude data. Enter your latitude and longitude received from the SMS and click the search button, Google Maps will show you the location map.

For example: When you receive the information transmitted from tracker, as follows:

Lat: +22.50500

Long: +114.01000

Speed: 0.00KM/H

Direction: 315.00

Date: 2008-04-25

Time: 16:39:45

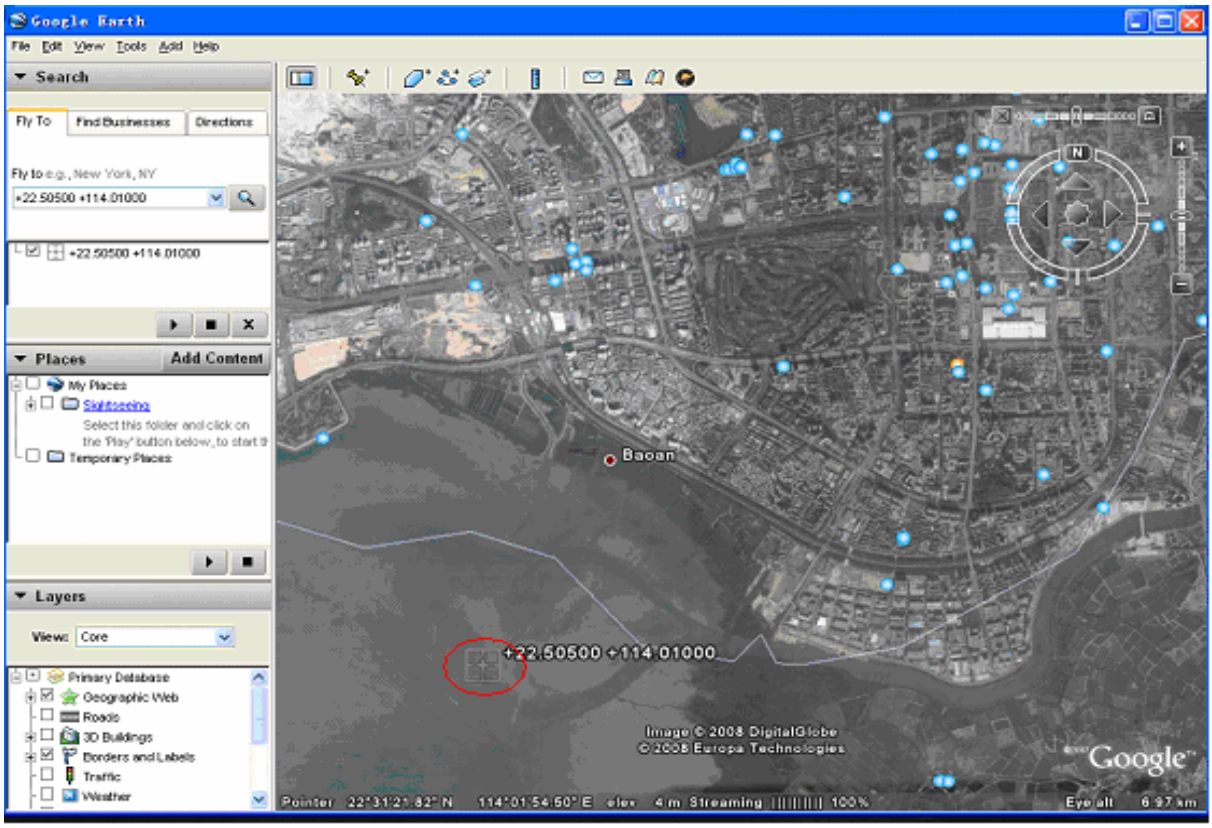
BS: 25ee0dff

Fix: A

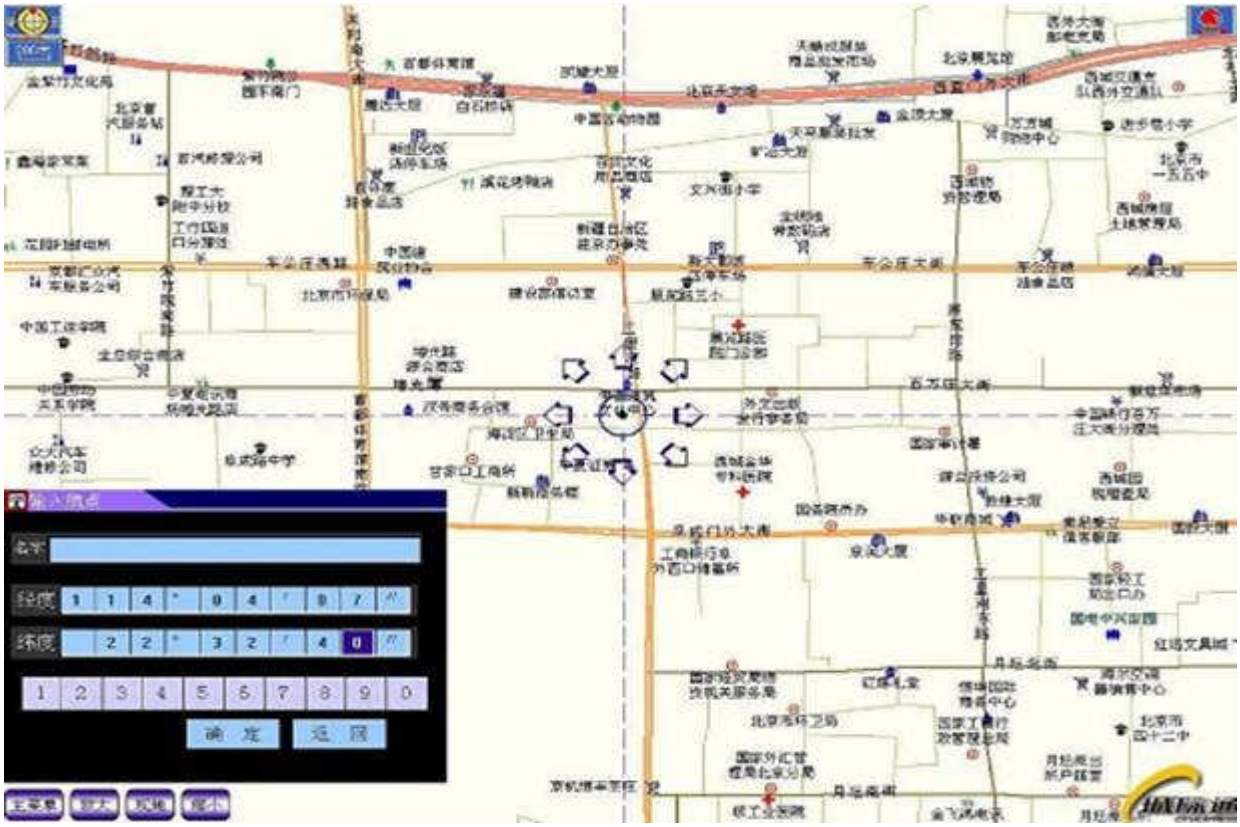
ID: 353686009002030

STATE: SMS

Find locations in Google Maps, enter in the appropriate location: +22.50500 +114.01000. Obtain the following picture：



4、Or you can use the PDA or navigation device on a local map software, enter the location data. (Note: Note change in location data format)



3 Single positioning request instructions

Product out of default mode in the SMS point to point, if you want to switch to GPRS mode, press the following command-line operation, GPSR online mode stored in the three phone numbers (1, 2, 3) and a 4-bit number of user passwords (and do not change as the first step), a group of TCP / IP server IP address and port number, 4 digit password and a GPRS GPRS access point APN number. User-defined text messages related configuration commands are non-volatile content, set after the success of the state machine switches from the impact of further changes until the receipt of the relevant instructions or reset operation.

GPRS online mode conversion:

Command format: 710 + user password 4

For example:: 7100000

Description: WhenAT-1 receive the SMS, to confirm the user password is correct, the switch to GPRS mode. After the success of the sender to send confirmation message to the "SET MODE OK, CURRENT MODE: GPRS".

The product location data uploaded to the Internet, three major steps:

1. **Set the GPRS Access Point (Access Point Name)**

Instruction format 1: # 803 # user password # APN # #

example: # 803 # 0000 # CMNET # #

directive format 2: # 803 # Password # APN # APN Username Password # APN # #

Note 1: different GSM / GPRS service providers to offer a different APN, please according to the local service provider's APN to choose to use the instruction format 1 or format 2 instruction set.

Note 2: When theAT-1 receiving the order, confirm the user password is correct, update GPRS access point for the new access point, set up after the success of confirmation to the sender to send a short message. If the sender is the instruction format 1, the return confirmation message "SET GPRS APN OK". If you send the order form 2, back to confirm the information "SET GPRS ACCOUNT OK". Note: APN factory set or reset to CMNET. APN for 3 to 35 letters, numbers, dot (.) Underscore (_) and hyphen (-) formed characters. APN APN username user and password, respectively, 3 to 20 characters consisting of numbers and letters, such as the need to change in domestic use.

2. Set the TCP / IP server IP address and port number

Instruction Format: # 804 # user password # # fixed IP address port # #

example: # 804 # 0000 # 222.125.12.32 # 80 # #

Note: WhenAT-1 received the order, confirm the user password is correct and update the internal saveAT-1 The IP address and port number, set up after the success of the sender send a confirmation to the short message: "SET SERVER IP AND PORT OK". The server IP address and port number provided by the vehicle monitoring service provider.

3, Regular data upload settings

Instruction Format: # 805 # user password # From each sample interval T # N # # number of data section

Example: # 805 # 0000 # 6 # 10 # #

Function: sampling time T in seconds, the domain of 【10 , 59999】, upload data each time the Number N, the domain of 【1.50】. When theAT-1 receiving the order, confirm the user password is correct, send a confirmation to the sender short message: SET GPS SAMPLING TIME AND QUANTITY OK. Instructions specified in both the sampling interval T, a continuous reading GPS NEMA data in the $ GPRMC statement, and stored in memory. When the number of articles stored on the user to set up the Number of N per upload, began to connect GPRS server and the data sent. If the network or other reasons due to the data is not sent to the server, then automatically open the

blind repayAT-1 features that did not upload the data automatically backed up successfully, when the network returned to normal after the replacement data to the server. From the data format as shown in 5.1.6, the data in the state labeled AUTO. When set to "upload data each time the Number of N" is 0, then close the regular upload, send a confirmation to the sender SMS: GPRS TIMER STOP.

Note:

1. In order to increase product reliability is an order of work and timely response to users, it is recommended to set the time do not upload more than 1 minute sampling interval * sample article that number is greater than 60.

2, the settings are not regularly upload affected by the switch machine, until once again received the relevant instructions to change or reset operation.

3, blind repay up to 300 back up data, more than 300, new data will automatically overwrite the first backup data.

Note: From time to time setting from Off to the impact of functional limitation, but by the GPS power, if power-saving features turned on, products in the power-saving state to stop upload location data; the GPS power-saving features can be found in the following applications, GPRS high-level The details.

Do the three-step basic setup, you can operate in the service of products for you to monitor the platform to see their vehicle running track, monitor the movements of the vehicle.

Advanced Applications

4 SMS point to point mode, set projects and advanced applications

4.1.1 Change Password command

Command format: 777 + new password 4 + Old Password 4

For example: 77712340000

Description: to confirm the old password is correct, update the user password for the new user password, set up after the success of confirmation to the sender to send a short message. Content for the "SET USER PASSWORD OK".

4.1.2 GPS status is set to command

Send SMS commands make GPS work in open / close / adaptive three states. GPS factory set or reset for the normal open state.

1, open the GPS instruction

Instruction format: 222 + user password 4

For example: 2,220,000

Description: When theAT-1 receiving the order, confirm the user password is correct, open the GPS power, after the success of the sender to send confirmation message to the "GPS ON OK".

2, close the GPS commands

Command format: 333 + user password 4

For example: 3,330,000

Description: When theAT-1 receiving the order, confirm the user password is correct, close the GPS, after the success of the sender to send the confirmation to the "GPS OFF OK".

3, adaptive GPS

instructions (power function) command: 100 + user password

For example: 1000000

Description: When theAT-1 received the order, confirm the user password is correct, immediately close the sender GPS to send a confirmation SMS: VIBRATION SENSOR ON OK. Products built-in vibration sensor, once the monitoring of movement and change to the tracking devices to immediately open the GPS, 5 minutes if there is no monitoring of changes to the tracking devices will automatically turn off sports GPS. Note: If the long flat roads or the highway, GPS may be long dormant, but will not be awakened. If at this time to real-time location tracking, the user can send 222 + user password to re-open the GPS.

4, GPS special power-saving mode

1) Special power parameters

Instruction format: 199 + user password + Xxx + Lyy + Hzz

For example: 1990000S030L01H03

Description: S030 that off GPS 30 minutes, and can be set (1 255). Open the GPS that the first phase of L01 is 1 minute, can be set (1 ~ 98), the first stage if the second stage is not positioned directly off GPS; if not positioning the first stage, the second phase, H03 GPS represents the total time for the opening, that the second phase of 2 minutes (ie Hzz-Lyy), you can set (3 ~ 99). When S

is set to 0, then exit the power saving mode automatically switches to the GPS normally open mode, that is, 188 command will not work. When the module receives the instruction to confirm the user password is correct, according to the user to set parameters to configure the S / L / H items, after the success to send the confirmation message: GPS AUTO MODE: (yy-zz) / xxx Minutes.

Note:

(1) Set S / L / H and other parameters, if the high is 0, then we must make zero. For example: To turn off gps30 minutes will set the S030, but not set to S30.

(2) Hzz opened GPS to set the total time, not less than Lyy.

(3) 199 instruction set of the parameters are not lost restart, the reset will not change until reset.

(4) Only in exceptional power-saving mode, the device can be set in accordance with the parameters of the timer switch 199, GPS, other modes will not.

2) Special power saving mode is on

Instruction format: 188 + user password

for example: 1880000

Description: 199 instruction set when the device is successful, send 188 commands to take effect. When you receive the confirmation code 188 instructions correctly, to switch to GPS mode power saving mode, the sender replies to the confirmation message: GPS AUTO MODE ON OK. After entering power-saving mode, the device 199 in accordance with the parameters set by instruction time switch GPS, in order to achieve power saving purposes.

Such as setting 1990000S030L01H03, sending 188 to enter this mode, the device according to the 199 instruction set, turn off the GPS 30 (S030) minutes, and then open the 1 minute (L01), if the GPS in the open for 1 minute (L01) localization, directly off GPS 30 min (S030). If a minute (L01) did not locate, will continue to open the GPS 2 min (H03-L01). 2 minutes regardless of whether the GPS positioning, all will be closed again for 30 minutes, again and again.

Note:

(1) switch to power saving mode GPS work, you must first set the command parameters 199.

(2) Open the power-saving mode, off the stage in the GPS, GPRS sampling time and historical data are uploaded will stop; open stage in the GPS if the positioning, GPRS uploaded regularly and historical data sampling will be back to normal.

(3) Open the power-saving mode, the GPS off stage, whether text mode or GPRS mode, the location

information if the request operations, such as 666, # 806, phone positioning, SOS, 4XX, then the GPS would be immediately Open, read the latest GPS data until the arrival of the next power cycle, and then turn off GPS.

(4) If you need real-time tracking, please use the GPS normally open mode.

4.1.3 time to send location information instruction

Instruction format: 4 xx + user password 4

For example: 4010000

Description: which is a 0-9 × that figure, when XX is less than 60, its unit is minutes, when XX Large at 60, its value is XX minus 60, the unit is the hour, that is 61 to 1 hour, 62 for 2 hours, and so on. When theAT-1 receiving the order, confirm the user password is correct,AT-1 set the current time as the initial time of time, XX for the interval to confirm the sender's mobile phone to send text message "TIMER START, REPEAT INTERVAL: <X> MINUTES ". Then start basic value of the initial time of time, when the arrival time interval × × 3.1.1 format to send location information, including information on status items automatically update STATE: TIMER. When XX is 00, the cancellation of regularly sending location instructions to confirm the sender's mobile phone to send text message "TIMER STOP".

Note: The current version of the maximum time interval can not exceed 2 hours, For a longer time, please let me company specially customized for you. From time to time functional limitations by the GPS function, when the GPS power saving features turned on, GPS is in sleep mode at this time regularly uploading invalid and will not upload.

4.1.4 Calling switch instruction

Calling off instruction format: 150 + user password

For example: 1500000

calling open instruction format: 151 + user password

For example: 1,510,000

Description: When theAT-1 before calling the relevant instructions to confirm the user password is correct, close the calling features (including the SOS distress, power alarm calling, fence alarm calling, speed alarm, etc), after the success of the sender to send the confirmation to the "SET VOICE CALL: OFF". When theAT-1 before calling open order, confirm the user password is correct, open the calling features (including the SOS distress, power failure alarm calling, fence

alarm calling, speed alarm, etc), after the success of the sender to send confirmation message to the "SET VOICE CALL: ON ".

4.1.5 Phone positioning function

Note: When the stored one of the three phone numbers of calls come in, and hang up after ringing sound 2-5, then the call number to send the location information such as 3.1.1, status information tips for the STATE: CALL. Non-stored phone numbers hang up incoming calls directly without any treatment.

4.1.6 Monitoring functions

Instruction format: 00X + user password

For example: 0000000

Description: When the device receives the order confirmation the user password is correct, according to the value of X, set the handset switch state. X = 1, the handset closed, the monitor mode. After the success, the sender should send the confirmation messages: SET PROFILE OK, CURRENT PROFILE: SILENT. . Handset is turned off if the stored user phone calls in, does not follow any prompts, in about 10 seconds after the automatic answer, the user can listen to the sound track-side, but the track-side can not hear the voice of the client. X = 0, turn on the handset, as the normal mode. After the success, the sender should send the confirmation messages: SET PROFILE OK, CURRENT PROFILE: NORMAL. If the stored user opens the handset phone call came in, there will be a tone, about 10 seconds after the automatic answer, the two sides can make a call. 5.1.6 instructions are treated as processing, which automatically updates the information state entries STATE: ANSWEER. Non-stored phone number incoming call directly to hang up.

Note: The factory set or reset state after the handset open (non-listening state).

4.1.7 Active help feature

Description: When the long press SOS button more than 3 seconds, immediately to the three phone numbers stored to send the location information, such as 3.1.1, the information in the state prompted the STATE: SOS. Also call a telephone number stored in the first. If unsuccessful (shutdown or not connected), then in turn call the second, third. If any of the stored numbers connected, can remotely monitor.

Note: If the calling state is off, it will not make calls, send text messages to pre-existing users only.

4.1.8 Electronic fence function

Electronic fence is to set the coordinates for the center of the circle, set the radius to determine the scope of the fence. When turned on, set the fence after theAT-1 beyond the scope of stored immediately after the No. 3 sent to a 3.1.1 format of location information. Information prompted the state to STATE: OS. Also call a telephone number stored in the first. If unsuccessful (shutdown or not connected), then in turn call the second, third. When theAT-1 set to re-enter the scope of the fence will immediately send to the No. 3 stored location information of a 3.1.1 format. Information in the state prompted the STATE: RS. Also call a telephone number stored in the first. If unsuccessful (shutdown or not connected), then in turn call the second, third.

1、Set the fenced area

According to the different coordinates input format, the user can choose the following format command operation.

Instruction format 1:003 + user password E / Wdddmm.mmmmN / Sddmm.mmRzzz.z

Example: 0030000E11406.0024N2233.4230R0.1

Description: E - E; W - W; N - north latitude; S - South latitude. Used in this example is E and N, please select the appropriate location according to the actual coordinates of format settings. The meaning of the various parts of the sample as follows:

Edddmm.mmmm is divided into units of degrees longitude information, which said ddd degrees, mm.mmmm said points. (Decimal point behind the four, followed by zero can not be omitted),

Nddmm.mmmm is divided into units of degrees latitude information, which dd that degree, mm.mmmm said points. (Decimal point behind the four, followed by zero can not be omitted)

zzz.z is the domain of radius 【999.9 - 0.1】, in units of KM.

When theAT-1 receiving the order to confirm the user password is correct to return to the sender to confirm the short message: SET GEO-FENCE OK, and open the electronic fence function.

Instruction format 2:004 + user password E / Wddd.dddddN / Sdd.ddddRzzz.z

For example: 0040000E114.10004N22.55705R999.9

Description: E - E; W - W; N - north latitude; S - south latitude. Used in this example is E and N, please select the appropriate location according to the actual coordinates of format settings. The meaning of the various parts of the sample as follows: Eddd.ddddd are degrees of longitude

information, which ddd.ddddd that degree. (Decimal point behind the five, followed by zero can not be omitted)

Ndd.ddddd is a degree of latitude in units of information, which dd.ddddd that degree. (Decimal point behind the five, followed by zero can not be omitted)

zzz.z is the domain of radius 【999.9 - 0.1】, in units of KM.

When theAT-1 receiving the order to confirm the user password is correct Return to sender confirmation short message: SET GEO-FENCE OK, and open the electronic fence function.

Instruction format 3:005 + user password Rzzz.z

Example: 0050000R0.1

Description: When theAT-1 receiving the order to confirm the correct user password immediately after reading the latest GPS data and determine the validity of (the second is for the A), effective is the current latitude and longitude information extracted coordinates of center of a circle as the fence, and to R value of the radius, while open electronic fence, a successful return after the first sending confirmation SET GEO-FENCE OK. GPS data is invalid if the date is to give up, continue to receive the next one, if 50 seconds have not received valid data, then return to the sender to send reminder: ERROR GPS DATA, TRY AGAIN LATER. After the GPS set to resume their original state (on / off / adaptive).

Note:

1, Fences can not exceed the radius of its domain, the fractional part of the right to a value of zero must enter zeros. For example: R = 1, must be entered as 1.0.

2, If the calling state is off, it will not make calls, send text messages to pre-existing users only.

3 Degrees and is divided into 60 binary conversion, that 1d = 60m.

2、Open the Geo-fence: 211 + user password

When the AT-1 receiving the order to confirm the user password is correct to open the electronic fence to return to the sender to confirm the short message: GEO-FENCE ON.

3、Close E-fence: 210 + user password

When theAT-1 receiving the order to confirm the user password is correct closed electronic fence to return to the sender to confirm the short message: GEO-FENCE OFF.

2> set the rectangular range of the electronic fence

Format: 006 + user password + GX, IO / I / O, E / W longitude limit + N / S latitude limit, E / W longitude limit + N / S latitude lower

Eg:0060000G1,IO,E114.10004N22.55705,E115.10006N23.55706

Note: GX, said the electronic fence X, X range 【1,16】. IO fencing in and out of all alarms; I selected as a finalist alarm; O as a fence alarm. Latitude and longitude values in degrees, decimal point to be retained after five, followed by zero can not be omitted.

IO: fences are out of the alarm; I: Finalist bar alarm; O: a fence alarm;

When the device receives the instruction to confirm the user password correctly, the sender returns confirmation messages: SET SQUARE GEO-FENCE GX (IO / I / O) OK.

Note:

(1) is set up, automatically open the fence, then the default fence type I0: out of the fence are the police.

(2) If the calling state is off, it will not make calls, SMS mode, only send messages to the user.

(3) The setting of this directive, and the switch from power-down effect of changes until you receive further instructions or reset operation.

(4) After reset, the value of latitude and longitude marked with 0. Fence is turned off.

2.1> Open rectangular electronic fence

Open all rectangular electronic fence instruction format: 311 + user password

Eg: 3100000

Electronic fence off a single rectangular Format: 310 + user password + GX

Eg: 3100000G5

Description: This command is used to open all the electronic fence and open a single rectangular rectangular electronic fence, GX means that an electronic fence X, X range【1,16】. When the device receives the instruction correctly recognized the user password to open the electronic fence sender rectangular return confirmation messages: Open all rectangular electronic fence resume SET ALL SQUARE GEO FENCE: OFF; open a single rectangular electronic fence is SET SQUARE GEO FENCE GX: OFF.

Note: If you set multiple alarms occurred while rectangular enclosure, the priority call G1 fence, fence G2, G3, G4 ... ... only to send the relevant location information, not make the call. Factory configuration and reset, the default state for the RS.

Attention:

Set of three ways of electronic fencing Choose one, when the product after receipt of the electronic fence electronic fencing instruction set feature automatically opens. When turned off the electronic fence is open again after the previous set are still valid.

4.1.9 Speed alarm

Instruction Format: # 122 # user password # X # #

Example: # 122 # 0000 # 250 # #

Note: X is the speed reference value, the data type integer, in units of km / hour (KM / H), the domain of 【0,999】. When theAT-1 receiving the order to confirm the user password is correct, it will set the speed reference value X, X = 0 时, close the speed alarm function, X =! 0 speed alarm function is turned on, after the success of the first stored user to send a confirmation information "SET RATE LIMIT: X. When the speed alarm function is turned on,AT-1 began to read the speed of GPS data and comparison with X real-time. If the GPS speed is greater than in X, the instructions at this time for speeding,AT-1 No. 3 stored immediately sent to a 3.1.1 format of location information, the information in the status prompt for the STATE: OVER SPEED. speeding alarm if it detects the speed of GPS in less than X, it indicates the speed at this time to return to a safe speed Under the driving,AT-1 immediately sent to the No. 3 a 3.1.1 format stored location information, the information in the status prompt for the STATE: SAFE SPEED.

4.1.10 Historical Data Uploading

In SMS mode, need to use this feature on the switch to GPRS mode on IP, APN settings, etc., specific instructions and upload the data format please see the application of GPRS-based operation.

1, historical data records set command format: # 807 # user password # X # #

Example: # 807 # 0000 # 30 # #

Note: X is a historical record of the sampling frequency, an integer, the domain of 【0,999】unit is seconds. When theAT-1 receiving the order to confirm the user password is correct, set the historical record of the sampling frequency is X. If X = 0, then close the historical data records, if X! = 0, then the start time interval to X seconds for the GPS data received and stored, after a successful return to the sender to confirm the information "SET SAMPLING OK".

Note: 1, each data record about 100B (BYTE), can store up to 3000.

2, the data covered by the stack of records that way. When the recorded data over 3000, the new data received will automatically overwrite the earliest recorded data.

3, if the power-saving feature is turned on and theAT-1 a long time at rest, then history will automatically shut down until theAT-1 is awakened and opened the GPS.

2 **Set of historical data upload instructions**

A, From 24-hour history:

Instruction Format: # 808 # user password # 24 # #

Example: # 808 # 0000 # 24 # #

Note: When receiving the order confirmationAT-1 user password is correct, return to sender confirmation message: "START UPLOAD 24H HISTORY RECORD". Sent to the server while starting the last 24 hours recorded in historical data, format and GPRS From time to time under the same model as shown in 3.2.16, the information in the state prompted the STORAGE.

B, to read all data records:

Instruction Format: # 808 # 0000 # #

Description: When theAT-1 receiving the order to confirm the user password is correct, return to sender confirmation message: "START UPLOAD ALL HISTORY RECORD". Also sent to the server storage area began to record all the historical data, as shown in formats such as 3.2.16. Information in the state prompted the STORAGE.

4.1.11 Low voltage alarm

When theAT-1 operating voltage, lower than the set value, read the GPS information, regardless of the validity of the three numbers stored immediately sent to the 3.1.5 format, location information,

including information on status items automatically update STATE: LP. Were sent three times, each time interval of 1 minute.

4.1.12 change the time zone settings instructions

Command format: 896 + user password 4 + D + NN

Example: 8960000E08

Description: One user password for the four, D values of E, W, that the time zone thing, NN is a two-digit (1-12), that when code. When the product after receipt of order, confirm the user password is correct, after the success of products set to sender send a confirmation SMS TIME ZONE SET OK, CURRENT: DN, such as: TIME ZONE SET OK, CURRENT: E8. Such as setting 8960000E08, set the success of all data related to time received GPS time basis with 8, set 896000W07, set all the success and timing of the data received on the basis of time by GPS 7. Default output GMT, if you set the parameters NN 00 cases, the output product recovery GMT

4.1.13 Single Orientation return address instruction in Chinese

Instruction format 1:667 + user password

for example: 6670000

Instruction format 2:667 + user password + MAP

example: 6670000MAP

Instruction format 3:667 + user password + MAP, WWW, HHH, ZZ

Example: 6670000MAP, 640,480,15

Description: When device receives instruction 1, and confirm the correct user password immediately after reading the GPS information, recognition information is valid, send the address information to send the number of Chinese.

Such as: King East Road, Shenzhen, Guangdong Poly Garden East Gate south 339 degrees east within a distance of 31 meters. Send commands 2, will return a URL, open the URL you can see the current location and a current position of the shots, screenshots default size is 240 * 320.

EG:http://www.gps069.com/cngps/mapaddr.asp?lng=114.09998&lat=22.55709&z=15&w=240&h=320

If you think the default screenshot is too small, you can send commands 3, you can customize the size and scale the screenshot, WWW is the width of the image, HHH for the picture height, ZZ for

the zoom level. (Note: WWW, HHH's value is less than 1000. ZZ between the values proposed in the 1-20, adjust the ZZ can adjust the zoom level shots). Such as:

http://www.gps069.com/cngps/mapaddr.asp?lng=114.09998&lat=22.55709&z=15&w=640&h=480

4.1.14 Single-shot Positioning links to Google Maps to return instructions

Instruction format 1:668 + user password

for example: 6680000

instruction format 2:668 + user password, WWW, HHH, ZZ

example: 6680000,999,999,15

Description: When the device receives the instruction 1, verify that the correct user password immediately after the read GPS information, recognition information is valid, send the current location of the Google Maps screenshot of the website, the screenshots default resolution of 240 * 320. If you think that image is too small, you can send commands 2, custom picture size, in which the representative picture of the width of the WWW, HHH on behalf of picture height, ZZ for the zoom level, you can set the size to comply with the resolution of your phone. (Note: WWW, HHH these two values can not be greater than 1000, ZZ between the values proposed 1-20) when the device receives the command, make sure the correct user password immediately after reading the GPS information, recognition information valid, send the current location of the Google Maps screenshot of the website, you set the capture resolution of the resolution. Screenshots URL example:

http://maps.google.com/staticmap?center=22.554765,114.104716&zoom=16&size=240x240&maptype=mobile&markers=22.554765,114.104716,bluea&sensor=false&hl=cn

4.1.15 Single Location Google Maps link instruction to return

Format: 669 + user password

for example: 6,690,000

Description: When the device receives the command, make sure the correct user password immediately after reading the GPS information, recognition information is valid, send the current location of the Google Maps link to the number and user available through your PDA or smart mobile Internet, Google Maps view in the current location. URL Example:

http://maps.google.com/maps?f=q&hl=en&q=22.554765,114.104716&ie=UTF8&z=16&iwloc=addr&om=1

Note: The above three commands, if sent in the past, not on the server connection or other reasons not connected, the reply:

1) If the connection is not on the server, the reply: SEVER BUSY, PLEASE TRY AGAIN LATER.

2) If there is no GPS location, then the reply: GPS UNAVAILABE, PLEASE TRY AGAIN LATER

3) for domestic policy reasons, in the country to use Google Maps will lead to deviation from the actual address.

4.1.16 single positioning command to return the Chinese Address

Command format: 667 + user password

for example: 6,670,000

Description: When the device received instructions and confirm the user password is correct, immediately read the GPS information, recognition information is valid, send the address information to send the number of Chinese, such as: Shenzhen, Guangdong King Poly East Gate of the East Verde Tiandong on the road south distance of 31 meters within 339 degrees.

1) If sent in the past, the server connection is not on, or other reasons not connected on the back: SEVER BUSY, PLEASE TRY AGAIN LATER.

2) If the GPS does not locate, then the reply: GPS NO FIX, PLEASE TRY AGAIN LATER 3) for domestic policy reasons, in domestic use Google Maps will lead to the actual address of nuclear deviation.

4.1.17 Positioning single link back to Google Maps screenshot instructions

Instruction format 1:668 + user password

example: 6680000

instruction format 2:668 + user password, WWW, HHH

example: 6680000,480,320

Description: When the device received an order to confirm the user password is correct, and immediately read the GPS information, recognition Information valid, send the current location at Google Maps screenshot, the screenshot of the default resolution of 240 * 320. If you think that

picture too, you can send commands 2, custom picture size, in which the representative picture of the width of the WWW, HHH representative of the image height can be set to comply with the resolution of the size of your phone. (Note that this is not the value of 2 can be larger than 1000) when the device receiving the order, confirm the user password is correct, and immediately read the GPS information, recognition information is valid, send the current location on Google Maps screenshot of the site, the screenshot resolution you set the resolution. Screenshots URL example:

http://maps.google.com/staticmap?center=22.554765,114.104716&zoom=16&size=240x240&maptype=mobile&markers=22.554765,114.104716,bluea&sensor=false&hl=cn

4.1.18 Single Location Google Maps Link command to return

Instruction format: 669 + user password

example: 6,690,000

Description: When device receiving the order, confirm the user password is correct, and immediately read the GPS information, recognition information is valid, send the current location on Google Maps link to the number, then the user through your PDA or smart phone access, view in Google Maps here.

Website Example:

http://maps.google.com/maps?f=q&hl=en&q=22.554765,114.104716&ie=UTF8&z=16&iwloc=addr&om=1

Note: Due to domestic policies, so if in the country, the map will be biased

4.1.19 Automatic Update command

Command format:! - User password, FTP address, user name, password

for example:! -0000, Igarin.gicp.net, 123, 0000

Description: When the device receiving the order to confirm the user password is correct, the automatic restart and automatically log on FTP address of the server download. When the update again after a successful reboot into normal use.

Note: FTP address length 【5.35】, can also domain names, letters, numbers, dot (.) Underscore (_) and hyphen (-) form. User name FTP server user name, length【3.20】; password for the FTP server password length【3.20】. User name and password, respectively, numbers and letters. FTP server to clients on their own settings, upgrade to the product documentation, please consult your dealer.

5 GPSR products online mode settings and advanced applications

5.1.1 Change Password command

Command format: 777 + new password 4 + Old Password 4

For example: 77712340000

Description: to confirm the old password is correct, update the user password for the new user password, set up after the success of confirmation to the sender to send a short message. Content for the "SET USER PASSWORD OK".

5.1.2 GPS status is set to command

Send SMS commands make GPS work in open / close / adaptive three states. GPS factory set or reset for the normal open state.

1, **open the GPS instruction**

Instruction format: 222 + user password 4

For example: 2,220,000

Description: When theAT-1 receiving the order, confirm the user password is correct, open the GPS power, after the success of the sender to send the confirmation to the "GPS ON OK".

2, **close the GPS commands**

Command format: 333 + User Password 4

For example: 3,330,000

Description: When theAT-1 receiving the order, confirm the user password is correct, close the GPS, after the success of the sender to send the confirmation to the "GPS OFF OK".

3, **Adaptive GPS instructions (power function)**

Commands: 100 + user password

For example: 1000000

Description: When theAT-1 receiving the order, confirm the user password is correct, close the GPS to the sender immediately send a confirmation SMS: VIBRATION SENSOR ON OK. Products built-in vibration sensor, once the monitoring of movement and change to the tracking devices to immediately open the GPS, within 5 minutes if there is no monitoring of changes to the tracking devices will automatically turn off sports GPS.

Note: If the long flat roads or the highway, GPS may be long dormant, but will not be awakened. If

at this time to real-time location tracking, the user can send 222 + user password to re-open the GPS.

4, GPS special power-saving mode

1) Special power parameters

Instruction format: 199 + user password + Xxx + Lyy + Hzz

For example: 1990000S030L01H03

Description: S030 that off GPS 30 minutes, and can be set (1 255). Open the GPS that the first phase of L01 is 1 minute, can be set (1 ~ 98), the first stage if the second stage is not positioned directly off GPS; if not positioning the first stage, the second phase, H03 GPS represents the total time for the opening, that the second phase of 2 minutes (ie Hzz-Lyy), you can set (3 ~ 99). When S is set to 0, then exit the power saving mode automatically switches to the GPS normally open mode, that is, 188 command will not work. When the module receives the instruction to confirm the user password is correct, according to the user to set parameters to configure the S / L / H items, after the success to send the confirmation message: GPS AUTO MODE: (yy-zz) / xxx Minutes.

Note: (1) Set S / L / H and other parameters, if the high is 0, then we must make zero. For example: To turn off gps30 minutes will set the S030, but not set to S30.

(2) Hzz opened GPS to set the total time, not less than Lyy.

(3) 199 instruction set of the parameters are not lost restart, the reset will not change until reset.

(4) Only in exceptional power-saving mode, the device can be set in accordance with the parameters of the timer switch 199, GPS, other modes will not.

2) Special power saving mode is on

Instruction format: 188 + user password

for example: 1880000

Description: 199 instruction set when the device is successful, send 188 commands to take effect. When you receive the confirmation code 188 instructions correctly, to switch to GPS mode power saving mode, the sender replies to the confirmation message: GPS AUTO MODE ON OK. After entering power-saving mode, the device 199 in accordance with the parameters set by instruction time switch GPS, in order to achieve power saving purposes.

Such as setting 1990000S030L01H03, sending 188 to enter this mode, the device according to the 199 instruction set, turn off the GPS 30 (S030) minutes, and then open the 1 minute (L01), if the GPS in the open for 1 minute (L01) localization, directly off GPS 30 min (S030). If a minute (L01)

did not locate, will continue to open the GPS 2 min (H03-L01). 2 minutes regardless of whether the GPS positioning, all will be closed again for 30 minutes, again and again.

Note: (1) switch to power saving mode GPS work, you must first set the command parameters 199.

(3) Open the power-saving mode, off the stage in the GPS, GPRS sampling time and historical data are uploaded will stop; open stage in the GPS if the positioning, GPRS uploaded regularly and historical data sampling will be back to normal.

(3) Open the power-saving mode, the GPS off stage, whether text mode or GPRS mode, the location information if the request operations, such as 666, # 806, phone positioning, SOS, 4XX, then the GPS would be immediately Open, read the latest GPS data until the arrival of the next power cycle, and then turn off GPS.

(4) If you need real-time tracking, please use the GPS normally open mode.

5.1.3 Single positioning request instructions

Command format: 666 + user password 4

Example: 6,660,000

Description: When theAT-1 receiving the order, confirm the user password is correct, read the GPS information, regardless of the validity of the original software, set it with the base station with return return to the sender.

Data format:

Lat: latitude (+/-) latitude value (precision after the decimal point 5)

Long:: longitude direction (+/-) longitude value (precision after the decimal point 5)

Speed: speed KM / H (precision after the decimal point 2)

Direction: Heading (accurate to two decimal places)

Date: Date YYYY-MM-DD

Time: Time HH: MM: SS (GMT)

BS: base station information FIX: Position Status (A / V)

ID: IMEI STATE: Information Status

Valid data sample:

Lat: +22.50500

Long: +114.01000

Speed: 0.00KM/H

Direction: 315.00

Date: 2008-04-25

Time: 16:39:45

BS: 25ee0dff

Fix: A

ID: 353686009002030

STATE: SMS

Invalid sample data:

Lat: +22.50500

Long: +114.01000

Speed: 0.00KM/H

Direction: 315.00

Date: 2008-04-25

Time: 16:39:45

BS: 25ee0dff

Fix: V

ID: 353686009002030

STATE: SMS

Note: If the cold start and the GPS does not locate, then return invalid information

Such as: ERROR GPS GPRMC FRAME DATA

BS: 27971054

ID: 353686009002030

STATE: SMS

5.1.4 Change the GPRS user name

Instruction Format: # 801 # user password # the new user name # # #

For example: # 801 # 0000 # username # #

Note: When theAT-1 receiving the order, confirm the user password is correct, update the user name the new user name, set After the success of the sender send a confirmation to the short message: "CHANGE USERNAME OK".

5.1.5 GPRS service password change

Instruction Format: # 802 # service password user password # new password # # # old services

Such as: # 802 # 0000 # 1111 # 0000 # #

Description: WhenAT-1 receiving the order, confirm the user password and the old service password is correct, Update Service password for new service password, set up after the success of confirmation to the sender sends a short message: "CHANGE PASSWORD OK".

5.1.6 From here instructions immediately

Instruction Format: # 806 # user password # #

Example: # 806 # 0000 # #

Description: WhenAT-1 receiving the order, confirm the user password is correct, the first stored number to send a confirmation SMS "START GPRS UPLOAD", sent to the server while the current store of data. From the data in the state prompted for the "SMS".

Upload format：

IMEI number service password # user name # # status # data

Base Station Information $ GPRMC ... . # Base Station Information $ GPRMC ... . #

Such as ：

#123456789000001#SR-6869BE#0000#SMS#3

#25ee0dff$GPRMC,083945.180,A,2233.4249,N,11406.0046,E,0.00,315.00,251207,,,A*6E

#25ee0dff$GPRMC,083950.180,A,2233.4249,N,11406.0046,E,0.00,315.00,251207,,,A*6E

#25ee0dff$GPRMC,083955.180,A,2233.4249,N,11406.0046,E,0.00,315.00,251207,,,A*6E ##

Note: The data format immediately upload status: SMS.

5.1.7 Calling switch instruction

Calling off instruction format: 150 + user password

For example: 1500000

Calling open instruction format: 151 + user password

For example: 1,510,000

Description: When theAT-1 before calling the relevant instructions to confirm the user password is correct, close the calling features (including the SOS distress, power alarm calling, fence alarm calling, speed alarm, etc), after the success of the sender to send the confirmation to the "SET VOICE CALL: OFF". When theAT-1 before calling open order, confirm the user password is

correct, open the calling features (including the SOS distress, power failure alarm calling, fence alarm calling, speed alarm, etc), after the success of the sender to send confirmation message to the "SET VOICE CALL: ON ".

5.1.8 Phone Upload

Description: When stored in one of three telephone calls come in to locate numbers, and 2-5 in the sound of ringing after the hang, then regarded as 3.2.16 command processing, the status prompt for the "CALL".

5.1.9 Monitoring functions

Instruction format: 00X + user password

For example: 0000000

Description: When the device receives the order confirmation the user password is correct, according to the value of X, set the handset switch state. X = 1, the handset closed, the monitor mode. After the success, the sender should send the confirmation messages: SET PROFILE OK, CURRENT PROFILE: SILENT. . Handset is turned off if the stored user phone calls in, does not follow any prompts, in about 10 seconds after the automatic answer, the user can listen to the sound track-side, but the track-side can not hear the voice of the client. X = 0, turn on the handset, as the normal mode. After the success, the sender should send the confirmation messages: SET PROFILE OK, CURRENT PROFILE: NORMAL. If the stored user opens the handset phone call came in, there will be a tone, about 10 seconds after the automatic answer, the two sides can make a call. 5.1.6 instructions are treated as processing, which automatically updates the information state entries STATE: ANSWEER. Non-stored phone number incoming call directly to hang up.

Note: The factory set or reset state after the handset open (non-listening state).

5.1.10 Emergency upload

Description: When the regular press SOS button more than 3 seconds, then regarded as 5.1.6 command processing, the status prompt for the "SOS". Stored at the same time the first phone call, if not successful (or not turned off), then in turn call the second, third. If any of the stored numbers connected, can remotely monitor.

Note: If the calling state is off, it will not make calls, only sending data to the server.

5.1.11 Electronic fence function

Electronic fence is to set the coordinates for the center of the circle, set the radius to determine the scope of the fence. When turned on, set after theAT-1 beyond the scope of the fence immediately sent to the server 3.2.16 format of location information. Information in the state prompted to: OS. Also call a telephone number stored in the first. If unsuccessful (shutdown or not connected), then in turn call the second, third. When theAT-1 again into the fenced area will be set immediately sent to the server 3.2.16 format of location information. Tips for the state information: RS. Also call a telephone number stored in the first. If unsuccessful (shutdown or not connected), then in turn call the second, third.

1, set the fenced area

According to the different coordinates input format, the user can choose the following format command operation.

Instruction format 1:003 + user password E / Wdddmm.mmmmN / Sddmm.mmRzzz.z

For example: 0030000E11406.0024N2233.4230R0.1

Description: E - E; W - W; N - north latitude; S - south latitude. Used in this example is E and N, please select the appropriate location according to the actual coordinates of format settings. The meaning of the various parts of the sample as follows: Edddmm.mmmm is divided into units of degrees longitude information, which said ddd degrees, mm.mmmm that sub. (Decimal point behind the four, followed by zero can not be omitted),

Nddmm.mmmm is divided into units of degrees latitude information, which dd that degree, mm.mmmm said points. (Decimal point behind the four, followed by zero can not be omitted)

zzz.z is the domain of radius 【999.9 - 0.1】, in units of KM.

When theAT-1 receiving the order to confirm the user password is correct to return to the sender to confirm the short message: SET GEO-FENCE OK, and open the electronic fence function.

Instruction format 2:004 + user password E / Wddd.dddddN / Sdd.ddddRzzz.z

For example: 0040000E114.10004N22.55705R999.9

Description: E - E; W - W; N - north latitude; S - south latitude. Used in this example is E and N, please select the appropriate location according to the actual coordinates of format settings. The meaning of the various parts of the sample as follows: Eddd.ddddd are degrees of longitude information, which ddd.ddddd that degree. (Decimal point behind the five, followed by zero can not be omitted)

Ndd.ddddd is a degree of latitude in units of information, which dd.ddddd that degree. (Decimal point behind the five, followed by zero can not be omitted)

zzz.z is the domain of radius 【999.9 -- 0.1】, in units of KM.

When theAT-1 receiving the order to confirm the user password is correct Return to sender confirmation short message: SET GEO-FENCE OK, and open the electronic fence function.

Instruction format 3:005 + user password Rzzz.z

Example: 0050000R0.1

Description: When theAT-1 receiving the order to confirm the correct user password immediately after reading the latest GPS data and determine the validity of (the second is for the A), effective is the current latitude and longitude information extracted coordinates of center of a circle as the fence, and to R value of the radius, while open electronic fence, a successful return after the first sending confirmation SET GEO-FENCE OK. GPS data is invalid if the date is to give up, continue to receive the next one, if 50 seconds have not received valid data, then return to the sender to send reminder: ERROR GPS DATA, TRY AGAIN LATER. After the GPS set to resume their original state (on / off / adaptive).

Note: 1, fences can not exceed the radius of its domain, the fractional part of the right to a value of zero must enter zeros.

For example: R = 1, must be entered as 1.0. 2, if the calling state is off, it will not make calls, send text messages to pre-existing users only. 3 degrees and is divided into 60 binary conversion, that 1d = 60m.

2、Open the e-fence: 211 + user password

When theAT-1 receiving the order to confirm the user password is correct to open the electronic fence to return to the sender to confirm the short message: GEO-FENCE ON.

3、Close E-fence: 210 + user password

When theAT-1 receiving the order to confirm the user password is correct closed electronic fence to return to the sender to confirm the short message: GEO-FENCE OFF.

2> set the rectangular range of the electronic fence

Format: 006 + user password + GX, IO / I / O, E / W longitude limit + N / S latitude limit, E / W longitude limit + N / S latitude lower

Eg:0060000G1,IO,E114.10004N22.55705,E115.10006N23.55706

Note: GX, said the electronic fence X, X range 【1,16】. IO fencing in and out of all alarms; I selected as a finalist alarm; O as a fence alarm. Latitude and longitude values in degrees, decimal point to be retained after five, followed by zero can not be omitted.

IO: fences are out of the alarm; I: Finalist bar alarm; O: a fence alarm;

When the device receives the instruction to confirm the user password correctly, the sender returns confirmation messages: SET SQUARE GEO-FENCE GX (IO / I / O) OK.

Note: (1) is set up, automatically open the fence, then the default fence type I0: out of the fence are the police.

(2) If the calling state is off, it will not make calls, SMS mode, only send messages to the user.

(3) The setting of this directive, and the switch from power-down effect of changes until you receive further instructions or reset operation.

(4) After reset, the value of latitude and longitude marked with 0. Fence is turned off.

2.1> **Open rectangular electronic fence**

Open all rectangular electronic fence instruction format: 311 + user password

Eg: 3100000

Electronic fence off a single rectangular Format: 310 + user password + GX

Eg: 3100000G5

Description: This command is used to open all the electronic fence and open a single rectangular rectangular electronic fence, GX means that an electronic fence X, X range【1,16】. When the device receives the instruction correctly recognized the user password to open the electronic fence sender rectangular return confirmation messages: Open all rectangular electronic fence resume SET ALL SQUARE GEO FENCE: OFF; open a single rectangular electronic fence is SET SQUARE GEO FENCE GX: OFF.

Note: If you set multiple alarms occurred while rectangular enclosure, the priority call G1 fence, fence G2, G3, G4 ... ... only to send the relevant location information, not make the call. Factory configuration and reset, the default state for the RS.

Attention:

Set of three ways of electronic fencing Choose one, when the product after receipt of the electronic fence electronic fencing instruction set feature automatically opens. When turned off the electronic fence is open again after the previous set are still valid.

5.1.12 Speed alarm

Instruction Format: # 122 # user password # X # #

Example: # 122 # 0000 # 250 # #

Note: X is the speed reference value, the data type integer, in units of km / hour (KM / H), the domain of 【0,999 】. When theAT-1 receiving the order to confirm the user password is correct, it will set the speed reference value X, X = 0 时, close the speed alarm function, X =! 0 speed alarm function is turned on, after the success of the first stored to send confirmation information "SET RATE LIMIT: X. When the speed alarm function is turned on,AT-1 began to read the speed of GPS data and comparison with X real-time. If the GPS speed is greater than in X, the instructions at this time for speeding,AT-1 a 3.2.16 immediately sent to the server location information formats, information in the state prompted the OVER SPEED. speeding alarm if it detects the speed of GPS in less than X, it indicates the speed at this time to return to a safe speed driving,AT-1 immediately 3.2.16 server sends a location information format, information in the state prompted the SAFE SPEED.

5.1.13 Historical data uploading

In SMS mode, need to use this feature to switch to GPRS mode prior to the IP, APN settings, etc. can only be completed, specific instructions and upload the data format please refer to GPRS mode, three-step basic setup.

1, **Historical data records set**

Command format: # 807 # user password # X # #

Example: # 807 # 0000 # 30 # #

Note: X is a historical record of the sampling frequency, an integer, the domain of 【0,999】unit is seconds. When theAT-1 receiving the order to confirm the user password is correct, set the historical record of the sampling frequency is X. If X = 0, then close the historical data records, if X! = 0, then

the start time interval to X seconds for the GPS data received and stored, after a successful return to the sender to confirm the information "SET SAMPLING OK".

Note: 1, each data record about 100B (BYTE), can store up to 3000.

2, the data covered by the stack of records that way. When the recorded data over 3000, the new data received will automatically overwrite the earliest recorded data.

3, if the power-saving feature is turned on and theAT-1 a long time at rest, then history will automatically shut down until theAT-1 is awakened and opened the GPS.

2 set of historical data upload instructions

A, From 24-hour history:

Instruction Format: # 808 # user password # 24 # #

Example: # 808 # 0000 # 24 # #

Note: When receiving the order confirmationAT-1 user password is correct, return to sender confirmation message: "START UPLOAD 24H HISTORY RECORD". Sent to the server while starting the last 24 hours recorded in historical data, format and GPRS From time to time under the same model as shown in 3.2.16, the information in the state prompted the STORAGE.

B, **Read all the data records**:

Instruction Format: # 808 # 0000 # #

Description: When receiving the order confirmationAT-1 user password is correct, return to sender confirmation message: "START UPLOAD ALL HISTORY RECORD". Also sent to the server storage area began to record all the historical data, as shown in formats such as 3.2.16. Information in the state prompted the STORAGE.

5.1.14 Low voltage Upload

When theAT-1 working voltage, when below the set value, then regarded as 3.2.16 command processing, and an increase in the data state "LP" key supporting characterization of the current state. Were made three times, each time interval of 1 minute.

5.1.15 Change the time zone settings instructions

Command format: 896 + user password 4 + D + NN

example: 8960000E08

Description: One user password for the four, D values of E, W, that the time zone thing, NN is a two-digit (1-12), that when code. When the product after receipt of order, confirm the user password is correct, after the success of products set to sender send a confirmation SMS TIME ZONE SET OK, CURRENT: DN, such as: TIME ZONE SET OK, CURRENT: E8. Such as setting 8960000E08, set the time and after the success of all relevant data to the GPS receiver on the basis of time plus 8, set 896000W07, set the time and after the success of all relevant data to the GPS receiver based on the reduction of time 7. Default output Greenwich time, if you set the parameters of NN for the 00 cases, product recovery output GMT

5.1.16 Single Orientation return address instruction in Chinese

Instruction format 1:667 + user password

for example: 6670000

Instruction format 2:667 + user password + MAP

example: 6670000MAP

Instruction format 3:667 + user password + MAP, WWW, HHH, ZZ

Example: 6670000MAP, 640,480,15

Description: When device receives instruction 1, and confirm the correct user password immediately after reading the GPS information, recognition information is valid, send the address information to send the number of Chinese.

Such as: King East Road, Shenzhen, Guangdong Poly Garden East Gate south 339 degrees east within a distance of 31 meters. Send commands 2, will return a URL, open the URL you can see the current location and a current position of the shots, screenshots default size is 240 * 320.

EG:http://www.gps069.com/cngps/mapaddr.asp?lng=114.09998&lat=22.55709&z=15&w=240&h=320

If you think the default screenshot is too small, you can send commands 3, you can customize the size and scale the screenshot, WWW is the width of the image, HHH for the picture height, ZZ for the zoom level. (Note: WWW, HHH's value is less than 1000. ZZ between the values proposed in the 1-20, adjust the ZZ can adjust the zoom level shots). Such as:

http://www.gps069.com/cngps/mapaddr.asp?lng=114.09998&lat=22.55709&z=15&w=640&h=480

5.1.17 **Single-shot positioning links to Google Maps to return instructions**

Instruction format 1:668 + user password

for example: 6680000

instruction format 2:668 + user password, WWW, HHH, ZZ

example: 6680000,999,999,15

Description: When the device receives the instruction 1, verify that the correct user password immediately after the read GPS information, recognition information is valid, send the current location of the Google Maps screenshot of the website, the screenshots default resolution of 240 * 320. If you think that image is too small, you can send commands 2, custom picture size, in which the representative picture of the width of the WWW, HHH on behalf of picture height, ZZ for the zoom level, you can set the size to comply with the resolution of your phone. (Note: WWW, HHH these two values can not be greater than 1000, ZZ between the values proposed 1-20) when the device receives the command, make sure the correct user password immediately after reading the GPS information, recognition information valid, send the current location of the Google Maps screenshot of the website, you set the capture resolution of the resolution. Screenshots URL example:

http://maps.google.com/staticmap?center=22.554765,114.104716&zoom=16&size=240x240&maptype=mobile&markers=22.554765,114.104716,bluea&sensor=false&hl=cn

5.1.18 Single Location Google Maps link instruction to return

Format: 669 + user password

for example: 6,690,000

Description: When the device receives the command, make sure the correct user password immediately after reading the GPS information, recognition information is valid, send the current location of the Google Maps link to the number and user available through your PDA or smart mobile Internet, Google Maps view in the current location. URL Example:

http://maps.google.com/maps?f=q&hl=en&q=22.554765,114.104716&ie=UTF8&z=16&iwloc=addr&om=1

Note: The above three commands, if sent in the past, not on the server connection or other reasons not connected, the reply:

1) If the connection is not on the server, the reply: SEVER BUSY, PLEASE TRY AGAIN LATER.

2) If there is no GPS location, then the reply: GPS UNAVAILABE, PLEASE TRY AGAIN LATER

3) for domestic policy reasons, in the country to use Google Maps will lead to deviation from the actual address.

5.1.19 invalid data is uploaded switch

Format: 08X + user password 4

Function: When theAT-1 received the instruction to confirm the user password is correct, according to the value of X is upload invalid data set switch state. X = 1, open invalid data upload. After the success confirmation to send the short message: INVALID DATA UPLOAD: ON, at this time whetherAT-1 GPS data received is valid will be uploaded to the server. X = 0, close the upload invalid data, set after the success of the short to send the confirmation message: INVALID DATA UPLOAD: OFF, then close the invalid data upload, only upload valid data.

Note: The factory set or reset the state to stop after the upload invalid data, the instruction set of the state not switch until it received the relevant instructions to change again, or reset operation.

Note:

1, this function is only valid in the GPRS mode,

2. default is OFF.

5.1.20 Call limit switch instructions

Open the command limit calls: 170 + user password

for example: 1.7

Call restriction off command: 171 + user password

for example: 1,710,000

Description: When the device receives the call limit open command, confirm the user password correctly, send the number of replies to the confirmation message: SET UNLIMITED MODE OFF OK. Equipment can only receive 3 to play back the stored phone numbers, non-stored numbers hang up incoming calls directly, without any treatment; limit close calls when the device receives instructions to confirm the user password correctly, to send a number reply to confirmation message: SET UNLIMITED MODE ON OK. Device can receive any phone call back the phone. Note: The

factory set or reset state after the open.

5.1.21 Automatic update instruction

1), the instruction format:! - User password, FTP address, user name, password,

2)for example:! -0000, Igarin.gicp.net, 123, 0000

Description: When the device receives the order confirmation password correctly, and automatically restart FTP server address automatically log download. When the update is successful will reboot again into normal use.

Note: FTP address length【5.35】, but also for domain names, letters, numbers, dots (.) Underscore (_) and hyphen (-) component. User name FTP server user name, a length of【3,20】; password for FTP server password length 【3,20】. User name and password, respectively, numbers and letters. FTP server to set their own customers, the upgrade file, please consult the product sales.

6 Accessibility

1, the command reset * RESET # 0000 # #.
Description: This command resets all the configuration information after the restart to the factory configuration.

2, the instruction restart * RESTART # 0000 # #
Description: This command only restart theAT-1, do not reset the configuration information.

3, the current configuration of the module to read
SMS command format: * GTAS #
Function: When the module receives instructions, return all the settings stored in the module.
Data format:
IMEI: marked as code
MOD: Point to Point (SMS P2P 2) / messaging platform (SMS SC) / GPRS
GPS: normally open (ON) / normally closed (OFF) / power (AUTO)
HFR: hands-free switch
MTPRF: Monitor (SILENT) / normal (NORMAL)
BS: base station information to return the number of
GEO-FENCE = ON / OFF longitude longitude, latitude latitude (R radius (minimum 0.1KM)
GEO-FENCE STATE: RS / OS
DEFENCE: ON / OFF power failure alarm switch
VOICE: ON / OFF switch calling
POWER: ON / OFF power switch off oil
RATE: XX speeding baseline
ST: location information request interval timer
TN: SMS mode timer request number

INVALID UPLOAD : Invalid Data From switch
MOVE: displacement of the alarm radius, displacement alarm switch
ACC PROMPT: ACC switching state switch
GU:, GPRS user name, password
SRV: Server IP address, port number
APN: GPRS access point, APN User Name , APN password
SAMP: From the sampling interval, first upload a few articles (go cart track uploaded regularly mode)
SAMP2: From the sampling interval, first upload a few articles (uploaded regularly stop throttling mode)
HISTORY SAMP: History By sampling interval

4, **Read the current number and password**

SMS command format: * GTAN #
Function: When the module receives instructions, return the module all the numbers and passwords stored, including the service center number and password, the user number and password.
Data Format:
U1: Number 1, password
U2: Number 2, password
U3: No. 3, password
SC: Service Center number, service code

6.2 The state labeled

Status	Corresponding identity
666 single request	SMS
4XX regularly sent	TIMER
Phone Location	CALL
Answer	ANSWER
Seek help	SOS
Power failure alarm alarm	DEF
A fence	OS
Finalists selected	RS
Speed alarm	OVERSPEED
Safe speed	SAFESPEED
Historical Data Upload	STORAGE
Low voltage alarm	LP

806 single-hair positioning	SMS
From time to time to go car track	AUTO
From time to time stop throttling	AUTOLOW

6.3 List of products manufactured state

Configuration items	Status	Configuration items	Status	Configuration items	Status
Mode	Point to Point	Stored phone	Air	Password	0000
GPS Status	Open	Time to send	Stop	The number of base stations	1
Power failure alarm	Off (disarm)	Electronic fence	Close	Calling switch	Open
Service center number	Air	GPRS Password	0000	GPRS user name	V500
ANP	CMNET	IP Address	0.0.0.0 0000	Shift alarm	Close
Calling switch	Open	Off petrol and electricity	Open (non-off petrol and electricity)	Speed alarm	Close
Historical data sampling	Stop	Historical Data Upload	Stop	Parking throttle upload	Stop
ACC switch state tips	Open	Upload invalid data	Close	Go cart track upload	Close

6.4 Instruction Set

Instruction	Explain
700+ Password	Point to Point mode
710+ Password	GPRS mode
003 Password E/Wxxxx.xxxxN/Syyyy.yyyyRzzz.z	Fenced area set (in degrees minutes)
004+ Password E/Waaa.aaaaaN/Sbb.bbbbbRzzz.z	Fenced area set (in degrees)
005+ Password Rzzz.z	Set the fenced area (the current location coordinates)
100+ Password	Power-saving features
#122# Password #x##	Set the speed alarm
150+ Password	Close Caller
151+ Password	Open calling
170+Password	Open the command call restrictions
171+Password	Close instructions call restrictions
210+ Password	Close fence detection
211+ Password	Open fence detection
222+ Password	Open GPS
333+ Password	Close GPS
667+ Password	Back to the Chinese position information
667+ Password,MAP	Return address information plus screenshots Chinese
667+ Password,MAP,WWW,HHH,ZZ	Back to the Chinese address information plus screenshots (screenshot to change the size and scale)
668+ Password	Back to Google Maps Links Screenshots
668+ Password,WWW,HHH,ZZ	Back to Google Maps screenshot link (screenshot to change the size and scale)
669+ Password	Back to Google Maps link
4xx+ Password	From time to time point to point mode
666+ Password	Location to return a single user ID
777+ New Password+Old Password	Change Password
* Stored number* Password * Serial number **	Change the stored number
#801# Password # New User ##	Change the GPRS user name
#802# Password # new service password # old service password ##	GPRS service password change
#803# Password #APN##	GPRS access point settings
#803#Password#APN#APNUser name #APNPassword##	GPRS access point settings
#804# Password # Fixed IP address and port ##	Set IP address and port number
#805# Password #Sampling intervalT# From the number of each clause N ##	From time to time take the car to track mode settings
#806# Password ##	Request From Single Location
#807# Password #X##	Set the sampling rate history
#808# Password #24##	From the historical data 24 hours
#808# Password ##	From all the historical data
#809# Password #x#y##	From time to time set the throttle stop mode
*RESET#0000##。	Reset all the configuration information after reboot
*RESTART#0000##	Restart device

Instruction	Explain
700+ Password	Point to Point mode
710+ Password	GPRS mode
003 Password E/Wxxxx.xxxxN/Syyyy.yyyyRzzz.z	Fenced area set (in degrees minutes)
004+ Password E/Waaa.aaaaaN/Sbb.bbbbbRzzz.z	Fenced area set (in degrees)
005+ Password Rzzz.z	Set the fenced area (the current location coordinates)
100+ Password	Power-saving features
#122# Password #x##	Set the speed alarm
150+ Password	Close Caller
151+ Password	Open calling
210+ Password	Close fence detection
211+ Password	Open fence detection
222+ Password	Open GPS
333+ Password	Close GPS
4xx+ Password	From time to time point to point mode
666+ Password	Location to return a single user ID
777+ New Password+Old Password	Change Password
* Stored number* Password * Serial number **	Change the stored number
#801# Password # New User ##	Change the GPRS user name
#802# Password # new service password # old service password ##	GPRS service password change
#803# Password #APN##	GPRS access point settings
#803#Password#APN#APNUser name #APNPassword##	GPRS access point settings
#804# Password # Fixed IP address and port ##	Set IP address and port number
#805# Password #Sampling intervalT# From the number of each clause N ##	From time to time take the car to track mode settings
#806# Password ##	Request From Single Location
#807# Password #X##	Set the sampling rate history
#808# Password #24##	From the historical data 24 hours
#808# Password ##	From all the historical data
#809# Password #x#y##	From time to time set the throttle stop mode
*RESET#0000##。	Reset all the configuration information after reboot
*RESTART#0000##	Restart device
081+ Password	GPRS mode, open the invalid data upload
080+ Password	GPRS mode close invalid data upload